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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR <sup>1</sup>	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,314	03/11/2002	Johannes Vaananen	2132-59PUS	3653

7590 11/20/2003  
Lance J Lieberman  
Cohen Pontani Lieberman & Pavane  
Suite 1210  
551 Fifth Avenue  
New York, NY 10176

EXAMINER

OSORIO, RICARDO

ART UNIT	PAPER NUMBER
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2673

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DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

**Application No.**

10/049,314

**Applicant(s)**

VAANANEN JOHANNES

**Examiner**

RICARDO L OSORIO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 9 & 10.                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because there is more than one paragraph.

Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Deeran et al (5,594,471).

Regarding claim 1, Deeran teaches of a method for presenting an alphanumeric keyboard (col. 5, lines 6-13) with an electronic device (Fig. 1, reference character 10), comprising the steps of: dividing the alphanumeric keyboard into two or more parts (col. 1, lines 32-38, col. 4, lines

24-34 and col. 6, lines 1-7); presenting one part of the alphanumeric keyboard on the touch screen of the electronic device (Fig. 1, reference character 14, col. 4, lines 61-63, and col. 5, lines 10-12); and placing the other part(s) of the alphanumeric keyboard on the touch-sensitive cover of the electronic device outside the touch screen (col. 3, lines 36-39, and col. 4, line 64-col. 5, line 3, and col. 5, lines 7-10 and 12-13).

Regarding claim 6, Deeran teaches of an electronic device (Fig. 1, reference character 10) for presenting an alphanumeric keyboard (col. 5, lines 6-13), the electronic device comprising: a touch screen, or display touch zone, (Fig. 1, reference character 14); a touch-sensitive cover (Fig. 1, reference character 15); software components operating the electronic device (col. 1, lines 40-42, col. 4, lines 27-31); means for dividing the alphanumeric keyboard into two or more parts (col. 1, lines 32-38, col. 4, lines 24-34 and col. 6, lines 1-7); means for presenting one part of the alphanumeric keyboard on the touch screen (Fig. 1, reference character 14, col. 4, lines 61-63, and col. 5, lines 10-12); and one or more alphanumeric keyboard parts on the touch-sensitive cover of the electronic device outside the touch screen area (col. 3, lines 36-39, and col. 4, line 64-col. 5, line 3, and col. 5, lines 7-10 and 12-13).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deeran (see above rejection under 35 U.S.C. 102b) in view of Selig et al (6,492,978).

Regarding claim 2, Deeran teaches of touch zone (Fig. 1, reference character 14) displaying a keyboard application (col. 4, lines 61-62 and col. 5, lines 10-12). Also, Deeran teaches of a programmable user interface for defining portions of the display touch zone and to partition the touchscreen into areas having program-determined sizes and positions (col. 1, lines 35-38).

However, Deeran does not precisely teach of means for changing the keyboard set on the touch screen.

Selig teaches of means for changing the keyboard, or keypad, set on the touch screen (see Selig, col. 1, lines 54-64 and col. 2, lines 6-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the keyboard set, as taught by Selig, in the device of Deeran because it is well known in the art of touchscreens to program the computer to visually display any desired information and coordinate that information with the touchscreen, and to change a virtual keyboard and keypad dynamically as often as desired (col. 2, lines 6-11).

Regarding claim 3, Deeran is silent as to having an at least partially transparent touch-sensitive panel enabling said touch screen features.

Selig teaches of having an at least partially transparent touch-sensitive panel, or touchscreen, enabling the touch screen features (see col. 1, lines 35-36, 54-58 and 61-64).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an at least partially transparent touch-sensitive panel, or touchscreen, as taught by Selig, in the device of Deeran because it is widely known in the art of touch panels and touch screens that the touch panel overlaying the display screen needs to be at least partially transparent so that the images on the display can be transmitted through the touch panel (col. 1, lines 63-64) so that the images can be viewed by the user.

Next, also regarding claim 3, Deeran fails to teach of an at least partially transparent touch-sensitive panel enabling the touch-sensitive cover features.

Selig teaches of an at least partially transparent touch-sensitive panel (col. 1, lines 35-36 and 61-64, and col. 3, lines 40-42) that enables the touch-sensitive cover features (col. 6, lines 43-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the touch-sensitive cover features, as taught by Selig, in the device of Deeran for viewing, through the keyscreen, the virtual keypad displayed on the monitor behind the touch screen, or touch panel, while having the benefit of tactile feedback (see Selig, col. 4, lines 39-41, and col. 6, lines 46-48).

Regarding claim 7, Deeran teaches of touch zone (Fig. 1, reference character 14) displaying a keyboard application (col. 4, lines 61-62 and col. 5, lines 10-12). Also, Deeran teaches of a programmable user interface for defining portions of the display touch zone and to partition the touchscreen into areas having program-determined sizes and positions (col. 1, lines 35-38).

However, Deeran does not precisely teach of means for changing the keyboard set on the touch screen.

Selig teaches of means for changing the keyboard, or keypad, set on the touch screen (see Selig, col. 1, lines 54-64 and col. 2, lines 6-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the keyboard set, as taught by Selig, in the device of Deeran because it is well known in the art of touchscreens to program the computer to visually display any desired information and coordinate that information with the touchscreen, and to change a virtual keyboard and keypad dynamically as often as desired (col. 2, lines 6-11).

Regarding claim 8, Deeran is silent as to having an at least partially transparent touch-sensitive panel enabling said touch screen features.

Selig teaches of having an at least partially transparent touch-sensitive panel, or touchscreen, enabling the touch screen features (see col. 1, lines 35-36, 54-58 and 61-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an at least partially transparent touch-sensitive panel, or touchscreen, as taught by Selig, in the device of Deeran because it is widely known in the art of touch panels and touch screens that the touch panel overlaying the display screen needs to be at least partially transparent so that the images on the display can be transmitted through the touch panel (col. 1, lines 63-64) so that the images can be viewed by the user.

Next, also regarding claim 8, Deeran fails to teach of an at least partially transparent touch-sensitive panel enabling the touch-sensitive cover features.

Selig teaches of an at least partially transparent touch-sensitive panel (col. 1, lines 35-36 and 61-64, and col. 3, lines 40-42) that enables the touch-sensitive cover features (col. 6, lines 43-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the touch-sensitive cover features, as taught by Selig, in the device of Deeran for viewing, through the keyscreen, the virtual keypad displayed on the monitor behind the touch screen, or touch panel, while having the benefit of tactile feedback (see Selig, col. 4, lines 39-41, and col. 6, lines 46-48).

6. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deeran in view of Rosenberg et al (6,429,846).

Regarding claim 4, Deeran fails to teach of means for generating haptic feedback.

Rosenberg teaches of means for generating haptic feedback (col. 2, lines 54-58, and col. 16, lines 35-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have haptic feedback, as taught by Rosenberg, in the device of Deeran to assist and inform the user of interactions and events within a graphical user interface or other environment and ease cursor targeting tasks (see Rosenberg, col. 2, lines 56-59).

Regarding claim 9, Deeran fails to teach of means for generating haptic feedback.



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Rosenberg teaches of means for generating haptic feedback (col. 2, lines 54-58, and col. 16, lines 35-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have haptic feedback, as taught by Rosenberg, in the device of Deeran to assist and inform the user of interactions and events within a graphical user interface or other environment and ease cursor targeting tasks (see Rosenberg, col. 2, lines 56-59).

7. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deeran in view of Liebenow et al (US 2002/0118175).

Regarding claim 5, Deeran fails to teach of some of the other parts of the alphanumeric keyboard comprising mechanical keys.

Liebenow teaches of a touch-sensitive panel, or touch-screen, (Fig. 6, reference character 118) overlaying a display (Fig. 1, reference character 116). Mechanical keys 146-156 are located at the periphery, or border area, outside of the touch-screen area, and one or more of these keys correspond to the keys in a conventional QWERTY keyboard, for example, space bar, shift, etc (page 2, paragraph 26, lines 8-14, page 3, paragraph 33, lines 5-17 and paragraph 35, lines 1-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the mechanical keys, as taught by Liebenow, in the device of Deeran because mechanical keys are widely known in the art of keyboards to be used for entering data and cursor information into the computer, also, they can be alternately and interchangeably used with other key structures, such as keys comprising a touch sensitive surface (page 3, paragraph 35, lines 6-

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8), depending on the user's desire of a harder or softer feel. Finally, mechanical keys are more economic and they save space.

Regarding claim 10, Deeran fails to teach of some of the other parts of the alphanumeric keyboard comprising mechanical keys.

Liebenow teaches of a touch-sensitive panel, or touch-screen, (Fig. 6, reference character 118) overlaying a display (Fig. 1, reference character 116). Mechanical keys 146-156 are located at the periphery, or border area, outside of the touch-screen area, and one or more of these keys correspond to the keys in a conventional QWERTY keyboard, for example, space bar, shift, etc (page 2, paragraph 26, lines 8-14, page 3, paragraph 33, lines 5-17 and paragraph 35, lines 1-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the mechanical keys, as taught by Liebenow, in the device of Deeran because mechanical keys are widely known in the art of keyboards to be used for entering data and cursor information into the computer, also, they can be alternately and interchangeably used with other key structures, such as keys comprising a touch sensitive surface (page 3, paragraph 35, lines 6-8), depending on the user's desire of a harder or softer feel. Finally, mechanical keys are more economic and they save space.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is (703) 305-2248. The examiner can normally be reached on Mon-Thu from 7:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at 305-4938.

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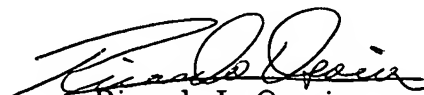
**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to: (703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or  
proceeding should be directed to the Technology Center 2600 Customer Service  
Office whose telephone number is (703) 306-0377.



Ricardo L. Osorio  
Examiner  
Art Unit: 2673

RLO  
November 17, 2003